CLAIMS

What is claimed is:

1. A bolt and nut threading system for positioning and locking a nut on a bolt, said system comprising

a bolt portion comprising an axial shaft, the exterior surface of said shaft comprising one or more axially oriented regions comprising threads oriented substantially orthogonally to the axial direction of said shaft and one or more axial oriented regions without threads;

and a nut portion, the interior surface of said nut portion comprising one or more axially oriented regions comprising threads oriented substantially orthogonally to the axial direction of said shaft and one or more axial oriented regions without threads,

wherein said threads on the interior surface of said nut portion are substantially complementary in pattern to said threads on the exterior surface of said shaft, and

wherein the surface area of said one or more regions on the exterior surface of said bolt shaft with threads is less than or equal to the surface area of said one or more regions on said nut interior surface without threads and wherein the surface area of said one or more regions on said nut interior surface with threads is less than or equal to the surface area of said one or more regions on the exterior surface of said bolt shaft without threads.

2. The bolt and nut threading system of claim 1, wherein the exterior surface of said bolt shaft and the interior surface of said nut contain two regions of equal surface area with threads alternating with two regions of equal surface area without threads, whereby after said nut is positioned on said bolt, a quarter turn of said nut locks said nut in place on said bolt.

3. The bolt and nut threading system of claim 1, wherein said threads on the interior surface of said nut portion are complementary in pattern to said threads on the exterior surface of said shaft.

4. The bolt and nut threading system of claim 1, wherein the exterior surface of said nut is knurled for ease of gripping.

5. The bolt and nut threading system of claim 1, wherein said bolt shaft comprises a slot extending axially through said shaft a portion of the length of said shaft and said nut comprises a hole extending through said nut orthogonally to the axis of said nut.

6. The bolt and nut threading system of claim 1, wherein said system further comprises a pin for positive locking of said nut to said bolt by means of said hole and said slot.

7. The bolt and nut threading system of claim 6, wherein said locking pin is a cotter pin.

8. The bolt and nut threading system of claim 6, wherein said locking pin is a wire.